# Translation



# **PCT**

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

| Applicant's or agent's file reference 2611WO0P   | FOR FURTHER ACTION SeeNotificationofTransmittalofInternational Preliminary Examination Report (Form PCT/IPEA/416) |   |   |  |  |  |  |  |  |
|--|---|---|---|--|--|--|--|--|--|
| International application No. PCT/JP00/03558   | International filing date (day/n<br>01 June 2000 (01.0  |   | Priority date (day/month/year)  03 June 1999 (03.06.99) |  |  |  |  |  |  |
| International Patent Classification (IPC) or national classification and IPC G01N 33/50, 33/15, A61K 45/00, A61P 37/04, 37/06, 20/00, C12N 15/12, C12Q 1/02  |   |   |   |  |  |  |  |  |  |
| Applicant TAKEDA CHEMICAL INDUSTRIES, LTD.   |   |   |   |  |  |  |  |  |  |
| <ol> <li>This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</li> <li>This REPORT consists of a total of sheets, including this cover sheet.</li> <li>This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</li> <li>These annexes consist of a total of sheets.</li> </ol> |   |   |   |  |  |  |  |  |  |
| 3. This report contains indications relating to the following items:  I Basis of the report  II Priority  III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  IV Lack of unity of invention  V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement  VI Certain documents cited  VII Certain defects in the international application  VIII Certain observations on the international application   |   |   |   |  |  |  |  |  |  |
| Date of submission of the demand  03 August 2000 (03.08.00)  |   | Date of completion of this report 21 June 2001 (21.06.2001) |   |  |  |  |  |  |  |
| Name and mailing address of the IPEA/JP  | Author  | Authorized officer  |   |  |  |  |  |  |  |
| Facsimile No   | Telenh  | Telephone No.   |   |  |  |  |  |  |  |

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

| I. Basis of the report   |   |   |                       |  |  |  |  |
|--|---|---|-----------------------|--|--|--|--|
| 1. With regard to the elements of the international application:*  |   |   |                       |  |  |  |  |
| $\boxtimes$  | the internation   | ional application as originally filed   | İ                     |  |  |  |  |
| 同  | the description   | ion:  |                       |  |  |  |  |
|  | pages   |   | , as originally filed |  |  |  |  |
|  |   | , fi  | led with the demand   |  |  |  |  |
|  | pages   | , filed with the letter of  |                       |  |  |  |  |
|  | the claims:   |   |                       |  |  |  |  |
| ب  |   |   | , as originally filed |  |  |  |  |
|  |   | , as amended (together with any statem  | ent under Article 19  |  |  |  |  |
|  | pages   |   | led with the demand   |  |  |  |  |
|  | pages   | , filed with the letter of  |                       |  |  |  |  |
|  | the drawings  | is.   |                       |  |  |  |  |
| <u></u>  |   |   | , as originally filed |  |  |  |  |
|  |   |   |                       |  |  |  |  |
|  | pages   | , filed with the letter of  |                       |  |  |  |  |
|  |   |   |                       |  |  |  |  |
|  | -   | listing part of the description:  |                       |  |  |  |  |
|  |   | fi  |                       |  |  |  |  |
|  | pages   | , filed with the letter of  | led with the demand   |  |  |  |  |
|  |   |   |                       |  |  |  |  |
| 2. With  | regard to the   | e language, all the elements marked above were available or furnished to this Authority in the application was filed, unless otherwise indicated under this item.     |                       |  |  |  |  |
|  |   | ere available or furnished to this Authority in the following language  | which is:             |  |  |  |  |
|  | the language  | ge of a translation furnished for the purposes of international search (under Rule 23.1(b)).  |                       |  |  |  |  |
|  | the language  | ge of publication of the international application (under Rule 48.3(b)).  |                       |  |  |  |  |
|  | the language or 55.3).  | ge of the translation furnished for the purposes of international preliminary examination (u  | nder Rule 55.2 and/   |  |  |  |  |
| 3. With preli  | n regard to a<br>minary examir  | any nucleotide and/or amino acid sequence disclosed in the international applicatio ination was carried out on the basis of the sequence listing:                     | n, the international  |  |  |  |  |
|  | contained in  | in the international application in written form.   |                       |  |  |  |  |
|  | filed togethe   | ner with the international application in computer readable form.   |                       |  |  |  |  |
|  | furnished su  | subsequently to this Authority in written form.   |                       |  |  |  |  |
|  | furnished su  | subsequently to this Authority in computer readable form.   |                       |  |  |  |  |
|  |   | nent that the subsequently furnished written sequence listing does not go beyond the al application as filed has been furnished.                                      | e disclosure in the   |  |  |  |  |
|  | The stateme   | nent that the information recorded in computer readable form is identical to the written shed.  | sequence listing has  |  |  |  |  |
| 4.   | The amend   | lments have resulted in the cancellation of:  |                       |  |  |  |  |
|  | the d   | description, pages  |                       |  |  |  |  |
|  | the c   | claims, Nos   |                       |  |  |  |  |
|  | the d   | drawings, sheets/fig  |                       |  |  |  |  |
| 5.   | This report he  | has been established as if (some of) the amendments had not been made, since they have be disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).** | een considered to go  |  |  |  |  |
| in th  | * Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17). |   |                       |  |  |  |  |
| ** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report. |   |   |                       |  |  |  |  |
|  |   |   |                       |  |  |  |  |

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

| V. | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |        |      |       |  |  |
|----|---|--------|------|-------|--|--|
| 1. | Statement   |        |      |       |  |  |
|    | Novelty (N)   | Claims | 1-16 | YES   |  |  |
|    |   | Claims |      | NO NO |  |  |
|    | Inventive step (IS)   | Claims | 1-16 | YES   |  |  |
|    |   | Claims |      | NO    |  |  |
|    | Industrial applicability (IA)   | Claims | 1-16 | YES   |  |  |
|    |   | Claims |      | NO NO |  |  |

2. Citations and explanations

Document 1: Kathryn T. Hall et al., "Human CD100: a novel leukocyte semaphorin that promotes B-cell aggregation and differentiation", Proc. Natl. Acad. Sci. USA, Vol.93, pp. 11780-11785 (1996)

Document 2: William H. Robinson et al., "Extensive polymorphism in the extra cellular domain of the mouse B cell differatiation antigen Lyb-2 CD72", The Journal of Immunology, Vol. 149, pp. 880 to 886

Concerning Claims 1 to 16

Document 1 discloses CD100 and its salt and Document 2 discloses CD72 and its salt. However, neither document discloses a screening method using the same.